REMARKS

Entry of the foregoing, and reconsideration and further examination of the subject application, in view of the amendments above and the remarks below, are respectfully requested.

By the above amendments, claims 17-19 have been amended. In addition, claim 15 and non-elected claims 20-22 have been canceled without prejudice or disclaimer. No new claims have been added. Thus, upon entry of the foregoing, claims 16-19 will remain pending in the application. Each of these claims is under consideration.

In the Office Action, claim 17 was objected to because of an informality. This informality has been corrected. Accordingly, the objection should be withdrawn.

Claim 18 was rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. In response, Applicants have amended claim 18 to be consistent with Example 4. Accordingly, the rejection is now moot and should be withdrawn.

Claim 19 was rejected under 35 U.S.C. § 102(b) as being anticipated by Reiff (U.S. Patent No. 4,108,814). In response, Applicants have amended claim 19. It no longer recites a sulfonated 3,4-dihydroxybutane. As a result, the claim as amended does not read on Example 8 of Reiff. Accordingly, the rejection is now moot and should be withdrawn.

Claims 15 and 19 were rejected under 35 U.S.C § 103(a) as being unpatentable over Reiff. For the following reasons, this rejection should be withdrawn.

The rejection of claim 15 is now moot because the claim has been canceled.

With respect to claim 19, Reiff does not render the claim obvious because it does not disclose or suggest a monomer comprising sulfonated and sulfinated 3,4-dihydroxybutane or disulfonated 3,4-dihydroxybutane. Reiff is silent on such compounds. As a result, there's no *prima facie* case of obviousness, and the rejection should be withdrawn.

Finally, claims 15-17 and 19 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Reiff in view of Bright (*J. Appl. Chem. Biotechnol.*, 1975, **25**, 901-912). For the following reasons, this rejection should be withdrawn.

The rejection is premised on the assertion that treating olefins with bisulfite results in the concurrent formation of sulfonate/sulfinate products and disulfonate products. However, the premise is false. As shown in Example 2 of the present application, it is possible to treat olefins with bisulfite and not get formation of the sulfonate/sulfinate product. Thus, when 1-butene-3,4-diol in Reiff is treated with bisulfite, sulfonate/sulfinate products and disulfonate products are not necessarily produced.

There's no suggestion or motivation in the applied references to produce sulfonate/sulfinate or disulfonate products. Reiff doesn't mention such products, and Bright calls them undesirable (see Abstract).

Accordingly, there's no *prima facie* case of obviousness, and the rejection should be withdrawn.

From the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order, and such action is earnestly solicited.

Attorney's Docket No. <u>008111-155</u> Application No. <u>10/601,877</u>

If the Examiner has any questions concerning this Reply, or the application in general, the Examiner is invited to telephone the undersigned at the number listed below.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

Date: May 3, 2005

Nhat D. Phan

Registration No. 39,581

P.O. Box 1404 Alexandria, Virginia 22313-1404 (703) 836-6620